

WHAT IS CLAIMED IS:

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1. A moving picture data producing apparatus to which non-compression moving picture data is input, comprising: quantization means; and

5 rate correction data producing means for producing rate correction data which is used at a time of bit rate change, whereby moving picture data having the rate correction data other than normal moving picture stream is produced.

10 2. A moving picture data producing apparatus according to Claim 1, wherein said rate correction data producing means conducts quantization different from said quantization means on an area in which the bit generation amount in each frame of the moving picture data is large, and the rate correction data
15 by which the rate change is possible, is produced.

20 3. A moving picture data producing apparatus according to Claim 1, wherein said rate correction data producing means, in a P frame of the moving picture data, conducts the quantization different from the quantization means on an area in which the provability referred at the time of the motion estimation time is low, and the rate correction data in which the rate change is possible, is produced.

25 4. A moving picture data producing apparatus according

to any one of Claims 1 to 3, further comprising means for recording reference inhibition area information which shows an area having the rate correction data in each frame of the moving picture data; and

5 motion compensation means for conducting motion compensation, wherein, when motion estimation in the next frame is performed, an area shown by the reference inhibition area information shows is inhibited from referring.

10 5. A moving picture data producing apparatus according to Claim 1, further comprising:

 motion compensation means for conducting motion compensation and outputting the referenced area information referred to at the time of the motion estimation; and

15 wherein said rate correction data producing means uses the referenced area information and selects the area in which the referenced degree is low in the frame, so that the rate correction data by which the rate change is possible with respect to the selected area is produced.

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 6. A moving picture data producing apparatus according to Claim 1, wherein said rate correction data producing means deletes high frequency components from an original image and conducts the same quantization as said quantization means, and
25 produces the rate correction data by which the rate change is

possible.

7. A moving picture data producing apparatus according to Claim 1, wherein said rate correction data producing means
5 decides a position at which rear portion bits can be deleted, with respect to area structured by a continuous arbitrary number of macro-blocks (for example, 16 x 16 pixels), and produces the rate correction data in which the position information is recorded, by which the rate change is possible.

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8. A moving picture data producing apparatus according to Claim 1, wherein said rate correction data producing means produces an I frame which is a coding image inside the frame, and produces the rate correction data by which the rate change
15 is possible.

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9. A moving picture data producing apparatus to which non-compression moving picture data is input, comprising:

quantization means;

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rate correction data producing means for producing the rate correction data which is the data used when the bit rate is changed; and

means for deciding a quarry out area by quarrying out a part of a frame to be decoded, whereby moving picture data
25 having the rate correction data other than normal moving picture

stream is produced.

10. A moving picture data producing apparatus according to Claim 9, wherein the rate correction data producing means
5 produces the rate correction data which the rate change is possible, to at least one of areas in respective quarry out areas in each frame.

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10 11. A moving picture data producing apparatus according to Claim 9, further comprising motion compensation means for conducting a motion compensation, in which it is inhibited to refer an area having the rate correction data in the preceding frame and to a different quarry out area to conduct motion estimation.

15 12. A moving picture coding apparatus for producing and outputting moving picture data whose bit rate is different from input moving picture data which is previously compression coded, said apparatus comprising:

20 bit rate correction means by which the bit rate is changed by referring to rate correction data contained in said input moving picture data, whereby the bit rate is changed while the input moving picture data is not decoded.

25 13. A moving picture coding apparatus according to Claim

12, wherein said bit rate correction means uses the rate
correction data whose bit amount is different, included in the
inputted moving picture data, and by replacing the previously
coded moving picture data, corresponding to the objective bit
5 rate, the bit rate change is conducted.

14. A moving picture coding apparatus according to Claim
12, wherein said bit rate correction means selects an area in
which the bit can be deleted, shown in the rate correction data
10 included in the input moving picture data corresponding to the
objective bit rate, and by deleting the bit, the bit rate change
is conducted.

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